Amendments to the Specification:

Please amend the paragraph beginning at line 7 of page 5 and ending at line 11 of page 5 as follows:

Briefly, and in accordance with at least one of the foregoing objects, an embodiment of the present invention provides a method which includes the steps of revising a polygon based on mask CD Critical Dimension (CD) distributions to provide a virtual mask, imaging the virtual mask to obtain image statistical parameters, and comparing the statistical parameters to design rule process tolerance requirements.

Please amend the paragraph beginning at line 12 of page 5 and ending at line 17 of page 5 as follows:

More specifically, the method may include the steps of simulating an aerial and/or latent image of the virtual mask, calculating response functions based on the simulated image, collecting measurements and calculating statistical parameters based on the response functions, and comparing the statistical parameters with design rule process tolerance requirements (i.e., for DI Development Inspection (DI) yield percentage for required mask manufacturing specification).

Serial No. 10/800,219
Art Unit: 2825
Page 3

Please amend the paragraph beginning at line 7 of page 7 and ending at line 8 of page 7 as follows:

Figure 2 illustrates the polygon after OPC, wherein edges of the polygon have been fragmented and moved to account for the litho imaging process distortion;

Please amend the paragraph beginning at line 7 of page 8 and ending at line 16 of page 8 as follows:

Mask quality parameters such as across reticle CD distribution affect wafer ~~DICD~~ Development Inspection critical Dimension (DICD) or printability yield (i.e., "below DI yield"), or post-etch wafer ~~FICD~~ Final Inspection Critical Dimension (FICD) (i.e., "below FI yield"). (Everything is applied to FI-yield , the method is not limited by the only DI-yield calculation). The parameters needed to control mask quality for acceptable DI yield is determined by the reticle enhancement technique (RET) used for improving wafer printability. The more stringent the requirements for mask quality control, the higher mask cost. Statistical analysis of the wafer DICD/print quality response (i.e., distributions) to the random variations of reticle control parameters can be used for studying the tradeoffs between mask quality and wafer performance in order to determine cost effective mask specifications for optimum DI yield.

Serial No. 10/800,219
Art Unit: 2825
Page 4

Please amend the paragraph beginning at line 20 of page 8 and ending at line 2 of page 9 as follows:

As shown in Figure 4, the method includes the steps of revising a polygon based on mask CD distributions to provide a virtual mask, working with the virtual mask to obtain response function statistical parameters from the mask image, and comparing the statistical parameters to ~~design rule~~ process tolerance requirements.

Please amend the paragraph beginning at line 3 of page 9 and ending at line 8 of page 9 as follows:

More specifically, the method preferably includes the steps of simulating an aerial and/or latent image of the virtual mask, calculating response functions based on the simulated image, collecting measurements and calculating statistical parameters based on the response functions, and comparing the statistical parameters with ~~design rule~~ process tolerance requirements (i.e., for DI yield percentage for required mask manufacturing specification).

Serial No. 10/800,219
Art Unit: 2825
Page 5

Please amend the paragraph beginning at line 1 of page 10 and ending at line 6 of page 10 as follows:

Once the virtual mask is generated, a simulated image is formed of the virtual mask, the CD or 2-D area is calculated (i.e., "response functions"), measurements are collected, and statistical parameters for CDs and 2-D area are calculated (such as mean, standard deviations, maximum, minimum, etc.). Then, the response functions are compared with ~~design rule~~ <u>process tolerance</u> requirements for DI yield percentage for required mask manufacturing specifications.

Serial No. 10/800,219
Art Unit: 2825
Page 6